

IN THE CLAIMS

1. (Currently Amended) In a data network comprised of a plurality of data switches interconnected to form a plurality of data paths forming a mesh configuration of data switches, a method of re-routing data messages between first and second data switches over a pre-established alternate data path linking said first and second data switches comprised of the steps of:

sending at least a first data message over a first data path from said first switch to said second switch;

receiving at said first switch one or more switch status messages from said second switch;

inhibiting generation of a switch status message at said first switch destined for another switch in the first data path different from the second switch upon not receiving said one or more switch status messages from said second switch at said first switch to initiate redirection of subsequent data messages over an alternate data path through said data network.

2. (Original) The data network of claim 1 wherein said alternate data path is a protection path through said network.

3. (Original) The method of claim 1 wherein said data switches are asynchronous transfer mode switches.

4. (Original) The method of claim 1 wherein said data switches are internet protocol (IP) routers.

5. (Original) The method of claim 1 wherein said switch status messages are comprised of a predetermined format, switch liveness message.

6. (Original) The method of claim 1 wherein at least one of said switches maintains a table of incoming link and path identifiers and of outgoing link and path identifiers.

7. (Currently Amended) The method of ~~claim 1~~ claim 1 wherein said first data message represents speech information.

8. (Original) The method of claim 1 wherein said first data messages represents computer data.

9. (Previously Presented) The method of claim 1 further comprising:

    sending subsequent data messages to a third data switch.

10. (Original) The method of claim 1 wherein said first data switch is a protection switch element.

11. (Currently Amended) In a data network comprised of a plurality of data switches interconnected to form a plurality of data paths forming a mesh configuration of data switches, a method of re-routing data messages around a data switch comprised of the steps of:

receiving at least a first data message over a first data path sent from a first switch to a second switch;

sending said first data message from said second switch to a third switch;

receiving at said second switch one or more switch status messages indicating the functionality of said third data switch;

inhibiting generation of a switch status message destined for said first switch at said second switch upon not receiving said switch status messages at said second switch from said third switch,

wherein inhibiting generation of a switch status message destined for said first switch at said second switch initiates redirection of subsequent data messages away from said second and third switches via a second data path through said data network.

12. (Original) The data network of claim 11 wherein said second data path is a protection path through said network.

13. (Original) The method of claim 11 wherein said data switches are asynchronous transfer mode switches.

14. (Original) The method of claim 11 wherein said data switches are internet protocol (IP) routers.

15. (Original) The method of claim 11 wherein said data switches are digital cross connect switches controlled by MPLS.

16. (Original) The method of claim 11 wherein said data switches are optical cross connects and switches controlled by MPLS.

17. (Original) The method of claim 11 wherein said switch status messages are comprised of a predetermined format, switch liveness message.

18. (Original) The method of claim 11 wherein at least one of said switches maintains a table of incoming link and path identifiers and of outgoing link and path identifiers.

19. (Previously Presented) The method of claim 11 wherein said data messages represent speech information.

20. (Previously Presented) The method of claim 11 wherein said data messages represent computer data.

21. (Previously Presented) The method of claim 11 further comprising:

    sending subsequent data messages to a fourth data switch.

22. (Previously Presented) In a data network comprised of a plurality of data switches interconnected to form a plurality of data paths forming a mesh configuration of data switches, a method of re-routing data messages between first and second data switches over a pre-established alternate data path linking said first and second data switches comprised of the steps of:

    sending at least a first data message over a first data path from said first switch to said second switch;

    sending a switch status message to said first switch in response to not receiving said first data message from said first switch, said switch status message operable to initiate redirection of subsequent data messages over an alternate data path through said data network.

23. (Previously Presented) In a data network comprised of a plurality of data switches interconnected to form a plurality of data paths forming a mesh configuration of data switches, a method of re-routing data messages around a data switch comprised of the steps of:

    sending at least a first data message over a first data path from a first switch to a second switch;

    sending said at least a first data message from said second switch to a third switch;

    sending a switch status message to at least one of said first and second switches in response to not receiving said first data message from said first switch, said switch status message initiating redirection of subsequent data messages away from said second and third switch via another data path through said data network.

24. (Original) The method of claim 23 wherein said first switch is a protection switch element.